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(54) Title: RHABDOVIRUSES WITH REENGINEERED COATS

(57) Abstract

Replication-competent recombinant rhabdoviruses that lack a functional glycoprotein gene and express at least one foreign polypeptide such as a celluar receptor for another virus in their viral envelopes are useful in the treatment of pathogenic viruses. In one embodiment, a recombinant vesicular stomatitis virus (VSV) lacking its glycoprotein (G) gene and expressing instead the HIV receptor and a coreceptor is employed in a method for treating persons infected with HIV. The recombinant virus is defective for entry into normal cells but is able to control HIV infection in a T cell line by replicating in, and killing, HIV-infected cells.

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